5   What is claimed is:

1. A method for providing navigation information supporting navigation through different images of one or more video programs, comprising the steps of:

parsing encoded packetized data representative of a sequence of
10 individual images to determine parameters to support navigation through said sequence of individual images;

formatting said determined parameters into a predetermined data structure; and

incorporating said determined parameters in said predetermined data
15 structure into a pre-formed navigation data field.

2. A method according to claim 1, including the step of

deriving said determined parameters comprising at least one of, (a) data identifying a group of pictures (GOP) format, (b) a number of GOPs in a video object
20 unit (VOBU), (c) data identifying reference frames in a VOBU or GOP, (d) a start address of image representative data, (e) an end address of image representative data, (f) a parameter identifying size of image representative data, (g) trick play mode selection information and (h) file structure information.

25   3. A method according to claim 1, wherein

said determined parameters in said navigation data field support navigation through images in at least one of, (a) a frame, (b) a group of pictures (GOP), (c) a video object unit (VOBU), (d) a program, (e) different programs and (f) video data of different MPEG compatible elementary streams.
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4. A method according to claim 3, wherein

said different programs comprise a video program and an associated program comprising one of, (i) audio data, (ii) Internet web page data, (iii) text data, and (iv) program guide data.
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5. A method according to claim 3, wherein
said different programs comprise two different video programs.

6. A method according to claim 1, wherein said incorporating step comprises

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incorporating said determined parameters in a previously blank area of said pre-formed navigation data field.

7. A method according to claim 1, including the step of
incorporating an indicator in a datastream including said encoded

15 packetized data and said navigation data field to indicate said determined parameters are incorporated in said navigation data field.

8. A method according to claim 1, wherein said pre-formed navigation data field comprises a header and a payload and said determined parameters are

20 incorporated in said navigation data field payload.

9. A method according to claim 1, including the step of   forming. said pre-formed navigation data field to accommodate subsequent insertion of said determined parameters.

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10. A method according to claim 1, wherein said encoded packetized data is stored and said parsing occurs in response to initiation of a data format conversion operation.

5   11. A method for converting image representative digital video data in a first data format to a different second data format in response to initiation of data format conversion, comprising the steps of:

generating navigation parameters to support navigation through a sequence of individual images by parsing encoded packetized data representative of a

10   sequence of individual images in said first data format;

incorporating said navigation parameters into a navigation data field; and

providing an output comprising packetized data representative of a sequence of individual images in said different second data format including said

15   navigation data field.

12. A method according to claim 11, wherein said step of incorporating said navigation parameters into said navigation data field comprises re-formatting an existing navigation data field with said navigation parameters.

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13. A method according to claim 11, wherein
said first data format comprises a read only data format and
said second data format comprises a different recordable data format.

25   14. A method for converting image representative digital video data of a first data format to a different second data format in response to initiation of data format conversion, comprising the steps of:

parsing encoded packetized data representative of a sequence of individual images in a first data format to derive parameters to support navigation

30   through said sequence of individual images;

incorporating said derived parameters into a pre-formed navigation data field; and

providing said encoded packetized data and said pre-formed navigation data field as an output in said second data format.

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15. A method according to claim 14, wherein said derived parameters comprise at least one of, (a) data identifying a group of pictures (GOP) format, (b) a number of GOPs in a video object unit (VOBU), (c) data identifying reference frames in a VOBU or GOP, (d) a start address of image representative data, (e) an end

40   address of image representative data, (f) a parameter identifying size of image representative data, (g) trick play mode selection information and (h) file structure information.

5   16. A method according to claim 15, wherein
said derived parameters in said navigation data field support navigation
through images in at least one of, (a) a frame, (b) a group of pictures (GOP), (c) a
video object unit (VOBU), (d) a program, (e) different programs and (f) video data of
10   different MPEG compatible elementary streams.

        17. A method according to claim 16, wherein
said different programs comprise a video program and an associated
program comprising one of (i) audio data, (ii) Internet web page data, (iii) text data,
15   and (iv) program guide data.

        18. A method according to claim 16, wherein
said different programs comprise two different video programs.

20   19. A method according to claim 14, including the step of
incorporating an indicator in a datastream including said encoded
packetized data and said navigation data field to indicate data format conversion has
been performed.

25   20. A method according to claim 14, wherein
said pre-formed navigation data field comprises a header and a payload
and said determined parameters are incorporated in said navigation data field payload.

        21. A method according to claim 14, including the step of
30   forming said pre-formed navigation data field to accommodate
subsequent insertion of said determined parameters.

5   22. A method for providing navigation information supporting navigation through different images of one or more video programs, comprising the steps of:

forming packetized data comprising,

(a) encoded data representative of a sequence of individual
10   images, and

(b) a navigation data field;

scanning said formed encoded image representative data to determine parameters to support navigation through said sequence of individual images; and

incorporating said determined parameters in said formed navigation
15   data field.

23. A method according to claim 22, including the step of

deriving said determined parameters comprising at least one of, (a) data identifying a group of pictures (GOP) format, (b) a number of GOPs in a video object
20   unit (VOBU), (c) data identifying reference frames in a VOBU or GOP, (d) a start address of image representative data, (e) an end address of image representative data, (f) a parameter identifying size of image representative data, (g) trick play mode selection information and (h) file structure information.

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